Emergency obstetrics surgical care - a challenge in Northern Nigeria: a review

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Abstract

Maternal Mortality is a leading menace globally. Most of the global burden of MMR comes from Asia and Sub-Saharan Africa alone. Some of the leading causes identified are toxaemia of pregnancy and Haemorrhages in pregnancy. Nigeria is ranked one of the top nation's leading the world in Maternal mortality. In fact, Nigeria is leading in Africa. Within Nigeria, the highest burden is in Northern Nigeria and in Northern Nigeria, North-Eastern Nigeria. Presenting with an obstetric emergency involving either a toxaemia of pregnancy or haemorrhage may require surgical interventions. However, this type of care is not readily available in the northern region. Where available, is not readily accessible. And where accessible and available, are not commonly utilised. There are several barriers to emergency surgical care in Northern Nigeria. However, current measures are geared towards reducing the risk factors associated with developing these pathologies amongst the reproductive aged women. As most of this risk factors, are a way of life; such as early (teenage) pregnancies, having many pregnancies, and so on. Urgent health education intervention is required.

Keywords: toxaemia, pregnancy, northern, Nigeria, surgical care, obstetrics

Introduction

Globally, almost 1000 women die from preventable causes related to pregnancy and childbirth. Maternal Mortality is a major burden in Sub-Saharan Africa. With as much as 86% of Mortalities arising from the LMICs Sub-Saharan Africa alone. This accounts for nearly two-thirds of the global burden. Nigeria is on the Fragile States index of top 15 countries contributing the most to the global burden of Maternal mortalities [1]. Though there are many causes of maternal mortalities, some of the leading causes are Haemorrhage and Pre-eclampsia or eclampsia [2].

Furthermore, they often present from the lower income surrounding communities as emergencies. Emergency care as regards MMR is either scored based on the availability of facilities and personnel that can provide essential and adequate Emergency Obstetrics Care (EmOC), as an EmOC 7 or an EmOC 9. With EmOC 7 being the minimum acceptable. Sadly, many facilities are not equipped up to the minimum standard of EmOC 7. Thus, worsening the burden on centres that are fully equipped and ranked an ENOC 9. The EmOC 9 facilities are those that can surgically handle obstetric emergencies as well as have facilities to take care of preterm babies delivered. This continues the trend of poor emergency outcomes in LMICs, as high patients load has been seen to be related with lower quality of emergency care and higher mortalities [3].

Discussion

A lot of these emergencies require emergency surgical care. This form of care is not offered in most health facilities in Nigeria, especially the primary health care centres. Some secondary healthcare facilities may offer some surgical care. However, most emergency surgical cares are often referred to tertiary facilities Once again, increasing the demand burden and decreasing the prognostic outcome. Moreso, from the first WHO delay identified. That is the delay in seeking for healthcare services by the patient. The increased demand for available and accessible care, especially in LMICs is one that still poses a global challenge. The Lancet commission on Global Surgery published a study in 2015 stating that, over 5 billion people globally have unmet surgical needs [4].

According to UNICEF, Nigeria accounts for the 4th highest maternal mortality rates in the world [5]. However, in Nigeria, Northern Nigeria has been Identified to be leading in MMR. In fact, Northern Nigeria has one of the highest MMR in the world. While about half of these are caused by Eclampsia, Ruptured Uterus and Anaemia. Furthermore, North-eastern Nigeria is the region with the most MMR in Northern Nigeria [6]. In Bauchi state, the maternal mortality ratio was found to be very high. Some of the preventable risk factors that were found were early adolescence pregnancies and unbooked pregnancies. Others were primigravity, with eclampsia,

haemorrhage and sepsis being the leading direct cause of maternal death, and anaemia being the leading indirect cause [7].

In the Obstetrics department, surgical needs may range from as little as elective caesarean section on demand to as severe are emergency Total Abdominal Hysterectomy (TAH) to save a woman's life. Nevertheless, through a long list of risk factors that have been identified and documented over the years, clinicians are now able to easily identify and manage some of these complications conservatively into an elective surgical care. However, it still amounts to strengthening of the emergency preparedness at all levels of the EmOC [8].

Furthermore, Studies have shown that obstetric emergencies were often a case of mother and unborn child being in danger. Such studies have made emphasis on time to presentation and care. A study conducted in Lagos state by Banke-Thomas *et al* revealed that the distance to be covered during an obstetric emergency was a critical determinant in the outcome of that condition. They also identified patients selectively seeking out the "big" hospitals where they believed they will get the comprehensive EmOC required care as part of the reasons why these delays existed. Hence, it was primarily a problem of accessibility [9]. When one brings this into the context of northern Nigeria, it is both a problem of accessibility and availability. In 2019, Y'au Samira *et al* conducted a study trying to assess the availability and utilization of emergency obstetric services in northern Nigeria, using Zaria as their point of focus. They came to the conclusion that urgent steps needed to be taken so as to address the debilitating and poor state of the EmOC facilities available in Zaria. They also recommended that urgent trainings were needed for the nurse and midwives so as to help them get more skilled as regards assisted vagina delivery. As pertained emergency obstetric surgical care, they realised the low availability of surgical staff in comparison to the workload at hand. They also realised that the poor staff number affected the possibility of 24 hours theatre services [10]. Further studies that were conducted in North-Eastern and Noth-Western Nigeria made similar deductions, that for us to even be able to attain the basic level of emergency care, more healthcare staff being employed was a crucial part towards achieving better prognostic results in the region [11].

Nevertheless, the risk factors that lead to the most prevalent pathologies requiring emergency obstetric care, which are the toxaemia of pregnancy, are highly prevalent in northern Nigeria. Especially early child marriages which has been identified as one of the leading factors predisposing to toxaemia of pregnancy [12-13]. A team of researchers went into Kano state of Nigeria to evaluate the knowledge and attitude of the reproductive aged women towards preeclampsia and eclampsia. They discovered that though some women had knowledge of this complications, they were basically indifferent to it [14]. This simply means that if we intend to reduce the mortalities related to toxaemia of pregnancies, we just had to work on our responses to the emergency. As the reproductive aged women in the region are indifferent and unless an urgent health educational intervention is carried out, will be unwilling to cooperate with preventive suggestions made. Such as avoiding early (teenage) pregnancies and excessive grand-multiparity, amongst other risk factors commonly prevalent.

Conclusion

It is safe to say that though the burden of emergency obstetric pathologies is on a rise in northern Nigeria, the facilities and staff to manage these conditions are not on an equal rise. There are multiple challenges facing the indigenes of this region, ranging from poor accessibility to availability, to even utilization of the equipment on ground. Furthermore, as the risk factors predisposing to needs for emergency obstetric care were basically intertwined with the way of life amongst the people of northern Nigeria, reducing the MMR in this region currently will need amplifying and stepping up of the EmOC responses. In addition, an emergency health intervention, in form of focused and targeted health education will be needed to improve the general statistics in Northern Nigeria.

Recommendation

1. Utilization of the Primary Healthcare Facilities withing the Local Government Area (LGAs) to carry out targeted health education to the women in the society.
2. To consider reviewing the marriage laws within the region. To reform the minimum age for the girl child being given out to marriage.
3. To carry out targeted health education to the men.
4. To utilise the religious leaders as instruments of change.
5. Training and employing of more surgical staff so as to help the services be more readily available 24/7.
6. Training the Nurses and Midwives in basic emergency obstetric surgical procedures.

Abbreviations

MMR – Maternal Mortality Rate
EmOC – Emergency Obstetric Care
LMICs – Low and Middle Income Countries
WHO – World Health Organization

Conflict of interest

The authors declare no conflict of interest.

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